

REMARKS

Applicant thanks the Examiner for the careful consideration given to this application. Reconsideration and allowance are now respectfully requested in view of the following remarks. Claims 1 and 3-18 are pending in this application. Claims 1, 7 and 13 are independent claims. Claim 2 was previously cancelled without prejudice or disclaimer.

Claim Rejections Under 35 U.S.C. §103

Claims 1 and 3-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Applicant's Prior Art Figure 2B (APAF) in view of U.S. Patent Publication No. 2002/0122280 to Ker et al. (hereinafter "Ker") and U.S. Patent No. 6,194,776 to Amano et al. (hereinafter "Amano"). This rejection is respectfully traversed.

Applicants submit that the combination of APAF, Ker and Amano does not teach or suggest the combination of elements recited in the pending claims. Claim 1, in part, recites "a path of said substrate extending through a single opening in said segmented conductive band having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate." Claims 7 and 13 recite similar features. The Office Action acknowledged that APAF does not teach or suggest these features but cited Ker to cure the deficiencies of APAF.

Ker does not cure the deficiencies of APAF, as outlined above. Paragraph 0047 of Ker, which is cited in the Office Action, discloses that the two deep N-well regions are placed closer to limit the connection region of the P-well and the P-substrate, thereby increasing the equivalent resistance between them. There is no teaching or suggestion in Ker, however, of "a path of said substrate extending through a single opening in said segmented conductive band having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate." (underlining added).

In the "Response to Arguments" section, the Office Action alleged that because paragraph 0047 of Ker discloses that the equivalent resistance is increased between the substrate

and well region, Ker has configured the device to have the proper distance and doping level necessary for increasing the substrate resistance. As noted above, paragraph 0047 Ker merely discloses that to increase the equivalent resistance between the P-well and the P-substrate, the two deep N-well regions are placed closer to limit the connection region of the P-well and the P-substrate. This disclosure of Ker is not equivalent to “a path of said substrate extending through a single opening in said segmented conductive band having a distance and doping level that increases substrate resistance by creating a single extended path for current which flows through said I/O pad to substrate contacts and drain during an ESD event and electrically connecting the first well to the substrate,” as recited in claim 1.

Amano does not cure the deficiencies of APAF and Ker.

Based on the distinctions noted above, Applicants submit that the combination of APAF, Ker and Amano does not teach or suggest the combination of elements recited in claims 1, 7 and 13. Each of claims 3-6, 8-12 and 14-18 depends on claims 1, 7 and 13 and incorporates all of the features of claims 1, 7 and 13, in addition to the further features recited in claims 3-6, 8-12 and 14-18. Hence, claims 3-6, 8-12 and 14-18 are also allowable at least due to the dependence on claims 1, 7 and 13. Therefore, Applicants respectfully request that this rejection of claims 1 and 3-18 under 35 U.S.C. §103 be withdrawn.

Disclaimer

Applicants may not have presented all possible arguments or have refuted the characterizations of either the claims or the prior art as found in the Office Action. However, the lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

CONCLUSION

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 09-0456, under Order No. 21806-00158-US from which the undersigned is authorized to draw.

Dated: July 28, 2009

Respectfully submitted,

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